

## New Records of *Eupines sphaerica* (MOTSCHULSKY) (Coleoptera, Staphylinidae, Pselaphinae) from the Ryukyus, Japan and Myanmar

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**Abstract** *Eupines sphaerica* (MOTSCHULSKY) is recorded from the Ryukyus, Japan and Myanmar for the first time. The male genital structure is redescribed in detail.

**Key words:** Coleoptera, Staphylinidae, Pselaphinae, Brachyglutini, *Eupines*, Japan, Myanmar.

### Introduction

The pselaphine species, *Eupines sphaerica* (MOTSCHULSKY) belonging to the tribe Brachyglutini, subtribe Brachyglutina, has been known in a large area from the Oriental to Australian Regions. The genus *Eupines* including about 130 species was classified into the subtribe Pselaptina by NEWTON & CHANDLER (1989). Recently, CHANDLER (2001) synonymized this subtribe with Brachyglutina.

*Eupines sphaerica* was originally described by MOTSCHULSKY (1851) from Sri Lanka. After the Coleopterorum Catalogus (RAFFRAY, 1911), its distributional range also includes India, Thailand, Sumatra, Singapore, Java, Borneo, Celebes and New Guinea. JEANNEL (1952, 1957) recorded this species from North and South Vietnam. In the present report, I am going to record it from Ishigakijima and Iriomotejima Islands, the Ryukyus, Japan and Myanmar for the first time. This is also the first record of the genus *Eupines* from Japan.

As to the structure of the male genitalia, JEANNEL (1952) already described and illustrated it in dorsal view. Then, the male genital structure of this species is redescribed in detail on the ventral side in the present study. The material was mounted with Canada balsam after dehydration, and the detailed structure was observed and sketched with a light microscope (Nikon Eclipse E–200).

Before going further, I wish to express my hearty thanks to Dr. Hiroyuki YOSHITOMI, Dr. Keiichi TAKAHASHI, Mr. Kenshi OHTSUKA and Mr. Yoshiyasu KUSAKABE for their kind offer of valuable materials.

*Eupines sphaerica* (MOTSCHULSKY)

[Japanese name: Chibi-maru-arizukamushi]

(Figs. 1–2)

*Bryaxis sphaerica* MOTSCHULSKY, 1851, Bull. Soc. imp. Naturalist. Moscou, **24**: 492. — REITTER, 1882, Verh. zool.-bot. Ges. Wien, **32**: 291. — SCHAUFUSS, 1887, Berl. ent. Z., **31**: 293.

*Brabaxis sphaerica*: RAFFRAY, 1890, Revue Ent., Caen, **9**: 125.

*Eupines sphaerica*: RAFFRAY, 1904, Annls. Soc. ent. Fr., **73**: 202; 1908, Gen. Ins., (64): 207; 1911, Coleopt. Cat., (27): 80. — JEANNEL, 1952, Revue fr. Ent., **19**: 84; 1957, *ibid.*, **24**: 18.

*Bryaxis siamensis* SCHAUFUSS, 1877, Psel. Siams, p. 9; 1882, Tijdschr. Ent., **25**: 68; 1882, Notes Leyden Mus., **4**: 148; 1887, Berl. ent. Z., **31**: 293; 1882, Bull. Soc. ent. Fr., 1882: 117. — REITTER, 1882, Verh. zool.-bot. Ges. Wien, **32**: 291. — RAFFRAY, 1904, Annls. Soc. ent. Fr., **73**: 202 (synonymised).

*Bryaxis fonensis* SCHAUFUSS, 1877, Psel. Siams, p. 10; 1882, Tijdschr. Ent., **25**: 69; 1887, Berl. ent. Z., **31**: 293. — REITTER, 1882, Verh. zool.-bot. Ges. Wien, **32**: 291. — RAFFRAY, 1904, Annls. Soc. ent. Fr., **73**: 202 (synonymised).

*Redescription.* Body length 1.26–1.32 mm in male, 1.23–1.27 mm in female,

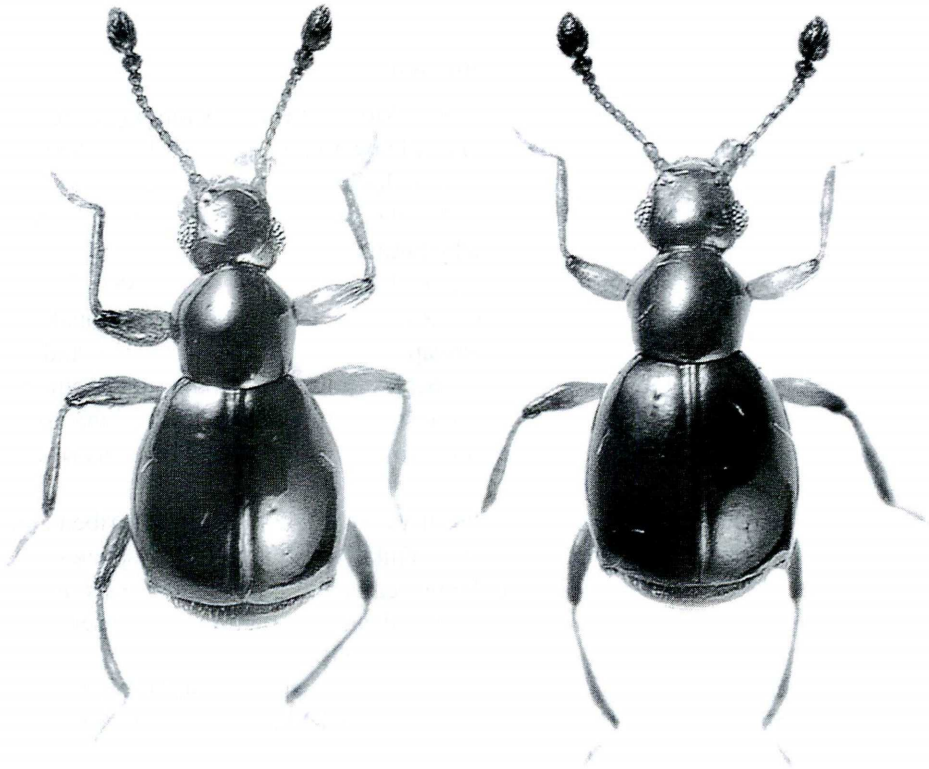


Fig. 1. *Eupines sphaerica* (MOTSCHULSKY); left: male; right female.

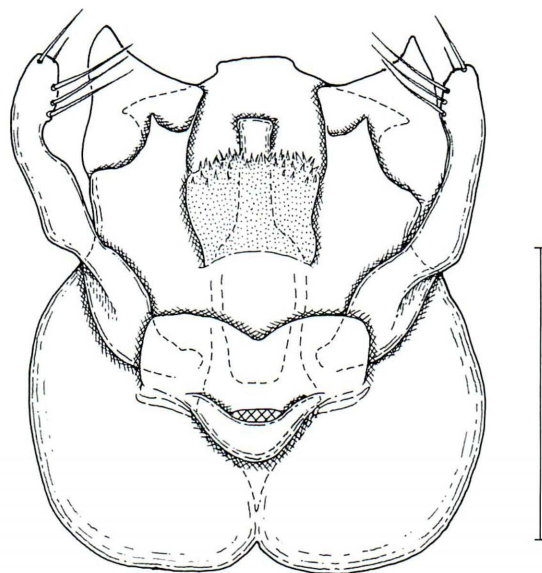


Fig. 2. *Eupines sphaerica* (MOTSCHULSKY) from Ishigakijima Is., Japan, male genitalia in ventral view. Scale: 0.1 mm.

width 0.58–0.62 mm in male, 0.56–0.60 mm in female, small and thick, narrowed anteriorly, almost smooth, shiny and very sparsely covered with short erect hairs on dorsal surfaces of head, pronotum and elytra. Head subglobose; eyes large and ovoid. Antennae 0.51–0.55 mm in length in male, 0.46–0.49 mm in female, short and moniliform, thickened at antennomeres X to XI. Maxillary palpi short and thick; palpomere IV the largest and fusiform. Pronotum subspherical, widest at anterior 1/3. Elytra very large and thick, narrowed anteriorly, each with an adsutural sulcus; basal fovea absent. Metasternum with large and shallow median depression in male. Fore tibiae slender, with a small denticle on inner side at apical 2/5 in male. Abdomen very short; sternite IV the largest, with a transverse median tubercle in male; sternite VIII strongly concave at the middle in male, flat in female.

Male genitalia about as long as wide, symmetrical and weakly sclerotized; parameres paired and divergent apically, each elongate, attached to inner side of apical projection of basal foramen at base, weakly incurved and slightly broadened near apex, with two setae at apex and three setae on inner side near apex; median lobe thick and broad, bilobed in basal part, weakly narrowed apicad; basal foramen small and transverse, with transverse apical and lip-like basal projections; apical part with a pair of broad processes, a membranous sac between lateral processes just below apical orifice and apically broadened dorsal wall; membranous sac covered with many microspines in apical part; endophallus consisting of bottleneck-like apical sclerite and Y-shaped basal sclerite.

*Specimens examined.* [Japan] 5♂, 3♀, Ohtake, by light trap, Ishigakijima Is.,



Okinawa Pref., 28-III-1998, H. YOSHITOMI leg.; 1♂, 1♀, Ishigakijima Is., Okinawa Pref., 5-I-1998, K. TAKAHASHI leg.; 3♂, 5♀, Hoshitate, by light trap, Iriomotejima Is., Okinawa Pref., 28-IV-1997, K. OHTSUKA leg.; 9♂, 22♀, same locality as above, 17-III-2004, S. NOMURA leg. [Myanmar] 13 exs., Shwe Hninsi, by light trap, Mayan-gon T/S, Yangon, V-2001, Y. KUSAKABE leg.; 122 exs., same data as above, but VI~VII-2001; 30 exs., same data as above, but VII~VIII-2001; 1♂, same data as above, but IV~V-2002; 1♀, same data as above, but VII-2002; 5♀, same data as above, but VI-2003; 2♀, same data as above, but XI-2003.

*Distribution.* Japan (the Ryukyus); India, Indochina, Sumatra, Singapore, Java, Borneo, Celebes and New Guinea.

*Remarks.* This species is recognized on having the small and rounded body, almost smooth surface of the head, pronotum and elytra, the denticulate fore tibia in the male and the bilobed median lobe of the male genitalia.

*Biological notes.* Most specimens examined in this report are collected by light traps, and the ordinary habitat of this species is still unknown.

## 要 約

野村周平：琉球およびミャンマーからのチビマルアリヅカムシ（和名新称）の記録（コウチュウ目ハネカクシ科アリヅカムシ亜科）。—— アトキリアリヅカムシ族アトキリアリヅカムシ亜族に属する *Eupines sphaerica* (MOTSCHULSKY) を、石垣島、西表島ならびにミャンマー、ヤンゴン市内より記録した。これらはほとんどが灯火採集により採集されたもので、通常の生息環境については知られていない。なお、本種にチビマルアリヅカムシという和名を新たに与えた。

## References

- CHANDLER, D. S., 2001. Biology, morphology, and systematics of the ant-like litter beetles of Australia (Coleoptera: Staphylinidae: Pselaphinae). *Mem. Entomol., Int., Gainesville*, **15**: 1–560.
- JEANNEL, R., 1952. Psélaphides de Saïgon. *Revue fr. Ent.*, **19**: 69–112.
- 1957. Sur quelques Psélaphides du Tonkin recueillis par le Père A. DE COOMAN. *Ibid.*, **24**: 5–32.
- MOTSCHULSKY, V., 1851. Énumération des nouvelles espèces de Coléoptères. *Bull. Soc. imp. Naturalist. Moscou*, **24**: 479–511. (Not seen.)
- NEWTON, A. F., JR., & D. S. CHANDLER, 1989. World catalog of the genera of Pselaphidae (Coleoptera). *Fieldiana, Zool.*, (N. S.), (53): 1–93.
- RAFFRAY, A., 1911. Pselaphidae. In SCHENKLING, S., (ed.), *Coleopterorum Catalogus*, pars 27. 222 pp. W. Junk, Berlin.